



Frequently Asked Questions about Mercury emissions from Washington landfills

from Ecology's Solid Waste & Financial Assistance Program

Q: Why did Ecology study mercury emissions from landfills?

A: Studies from other states, such as Florida and Minnesota, and EPA estimates show that some mercury can escape from landfills. We wanted to assess the mercury emissions from Washington landfills to see if we had a problem. We selected a group of eight landfills, some open and some closed, that are representative of Washington state's landfills.

Q: How does mercury escape from a landfill?

A: As organic material in landfills decomposes, methane gas and carbon dioxide are formed. Sometimes methane gas can combine with mercury in the landfill and create methyl mercury. The compound, methyl mercury, is a toxic substance and escapes the landfill in gaseous form.

Q: What did we find?

A: Washington's landfills emit less mercury than the average landfill in the United States. One of the eight landfills tested showed a result at about 60 percent of the national average. Two were below 10 percent of the national average. And the other five landfills emitted mercury at 1 percent or less of the national average. (See chart on page 2.) So, while our landfills remain an important waste-management option, we know that some mercury can escape (see study results on page 2).

Q: What can we do to prevent mercury emissions from landfills?

A: The key is to not dispose of mercury in landfills. Much work has been done to reduce mercury in products, but mercury products from household use, such as thermometers, thermostats, switches, some batteries, fluorescent lights, and children's athletic shoes (with the flashing lights), need to be recycled or disposed of at a household-hazardous-waste facility.

Check with your local solid waste authority or contact 1-800-RECYCLE for more information about household-hazardous-waste collection sites, and recycling and disposal options for mercury-contaminated wastes.

Q: What were the results of this study?

A: The table below shows the results from the landfills studied. Mercury emissions are given in milligrams per day. (A milligram is one-thousandth of a gram.) The estimated national average for landfill-mercury emissions is 350 milligrams per day.

Landfill Site	Mercury Emissions (mg/day)	% of National Average
1a	0.4	0.1
1b	1.1	0.3
2	33.7	9.6
3	0	0
4	0	0
5	1.2	0.3
6a	4.7	1.3
6b	2.4	0.7
7	219.9	62.8
8	26.0	7.4

Q: Where can I get additional information or copies of the report?

A: This report is available on the Department of Ecology internet site at <http://www.ecy.wa.gov/biblio/0507039.html>.

For a printed copy of this report, contact the Department of Ecology's Solid Waste & Financial Assistance Program by phone, 360-407-6129, Fax, 360-407-7157, or e-mail mdav461@ecy.wa.gov.

To conserve resources, limited quantities of this publication are available in print. You are encouraged to save and view the document on your personal computer.

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